



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,353	03/09/2000	Giuseppe Puppini	9340.680US11	3094

23552 7590 12/17/2001

MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

CHEVALIER, ALICIA ANN -

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 12/17/2001

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
09/522,353	PUPPIN	
Examiner	Art Unit	
Alicia Chevalier	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2001 .
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 + 8 .
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____ .

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-40 in Paper No. 9 is acknowledged.

Information Disclosure Statement

2. The information disclosure statement filed May 30, 2000 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Copies of references DE 195 19 484 A1, DE 43 41 521 A1, EP 0 113 209, EP 0 272 083, EP 0 285 705, Kirk-Othmer Concies Encyclopedia of Chemical Technology, and BFG were missing.

Specification

3. The use of the trademark Kevlar has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 4 recites "said flexible thermoplastic encloses said fabric". The specification only provides support for the fabric to be coated on one or both sides with the flexible resin (specification page 20, lines 22-24), not enclosed by the flexible resin.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 4, 17-19, 29, 30, and 36-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "said fabric" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 4 recites that "said flexible thermoplastic encloses said fabric," where the flexible thermoplastic is the material comprising the hinged region. The previous claims on which claim 4 depends only refer to rigid thermoplastic areas having a fabric layer and do not provide antecedent basis for a fabric layer in the hinged region.

The term "pick" in claim 17 is unclear which renders the claim vague and indefinite. It is unclear if it is 5-15 picks per inch or yard or etc.

Art Unit: 1772

The term "method" in claim 18 is unclear which renders the claim vague and indefinite. The claim is dependent on claim 14, which recites "the structure" in its preamble, and the claim does not appear to be a method claim. This is believed to be a typo and should read "structure."

Claim 18 is unclear in scope which renders it vague and indefinite. It is uncertain if the "surface coating" is different then the rigid thermoplastic coat in claim 1.

Claim 29 recites the limitation "said liner hinged regions" in line 1. There is insufficient antecedent basis for this limitation in the claim. Claim 29 depends from claim 25 which does not recite the limitation of a liner hinged region. It is believed that claim 29 should depend from claim 28 which does recite the limitation of linear regions. Also, there is a comma after linear that should be deleted.

Claim 30 is unclear in scope which renders it vague and indefinite. Claim 30 recites "hinged regions are enclosed by flexible thermoplastic," it is unclear how the hinged regions are enclosed by flexible thermoplastic since all they comprise is a flexible thermoplastic.

Claim 36 recites the limitation "said first and second rigid areas" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. Claim 36 is dependent on claim 25 which only gives basis for "a rigid thermoplastic coated flexible fabric having at least two predetermined, non-coplaner rigid composite areas.

Claim 37 is unclear in scope which renders the claim vague and indefinite. It is unclear if the sill, jamb, track or sash is part of the composite hinge structure or if Applicant is claiming a combination of a composite hinge structure and one of a sill, jamb, track or sash, or further more a particular structural design of the composite hinge.

Art Unit: 1772

Claim 38 is unclear in scope which renders the claim vague and indefinite. It is unclear if the hollow trim profile is part of the composite hinge structure or if Applicant is claiming a combination of a composite hinge structure and the hollow trim profile, or further more a particular structural design of the composite hinge.

Claim 39 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. In particular the claim references figure 1 to provide structural limitations.

Claim 40 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. In particular the claim references figure 3 to provide structural limitations.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

9. Claims 1-4, 7, 12, 13, 18-20, 22-24, 39 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaplo (6,294,729).

Kaplo discloses a clad polymer EMI shield comprising a base and a profile joined together by a hinge. The shielding includes a conductive layer of metallized fabric disposed on the base, hinge, and profile and folded over the ends of the profile and base (figure 2).

The base and profile are generally composed of solid polymeric material, while the hinge materials exhibits flexural characteristics (col. 3, lines 21-32). The base, hinge, and profile are manufactured from the same polymer material such as polyvinyl chloride or polyester (col. 3, lines 6-7 and col. 5, lines 17-65). The metallized fabric can be either woven or nonwoven comprising nylon fibers (col. 6, lines 17-43).

10. Claims 1-4, 12, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Hannert et al. (5,997,030).

Hannert discloses a vehicle instrument panel comprising a fabric layer and a substrate, where the portion of the fabric layer not connect to the substrate makes a hinge (see figure 5). The fabric is preferably a vinyl coated polyester fabric and the substrate is a relatively rigid plastic (col. 4, lines 24-32).

Claim Rejections - 35 USC § 102/103

11. Claim 9 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kaplo (6,294,729).

Kaplo discloses all the limitations of the instant claimed invention except for the claimed rigid area properties of modulus of elasticity, coefficient of thermal expansion, shrinkage, and impact. Since Kaplo discloses the same layers desired by Applicant, i.e. an amide fabric layer

Art Unit: 1772

coated with polyester or PVC, it is inherent that the EMI shield have the same properties as claimed in claim 9.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 5, 6, 25-31, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplo (6,294,729).

Kaplo discloses all the limitation of the instant claimed invention except the predetermined portions of said rigid areas are non-coplanar. Kaplo does disclose that the base includes a non-coplanar return which forms a throat to permit mounting the EMI shield on the first body (col. 5, lines 16-33 and figure 3). It would have been obvious to one of ordinary skill in the art to also add a return in the profile side of the shielding because it would permit mounting of the EMI shield on the second body as well.

14. Claims 8 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplo (6,294,729).

Kaplo discloses all the limitation of the instant claimed invention except that the width of the folded edges of the fabric is less than 5 centimeters. The exact length of all the folded edge is deemed to be a cause effective variable with regard to the fabric layer. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause

Art Unit: 1772

effective variable such as the length of the folded edge through routine experimentation in the absence of a showing of criticality in the claimed length. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

15. Claims 14, 16, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplo (6,294,729).

Kaplo discloses the claims invention except for the fibers are glass, cellulosic, plain weave, or pick fabric. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use glass or cellulosic, since it have been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

16. Claims 10, 11, 15, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplo (6,294,729).

Kaplo discloses all the limitation of the instant claimed invention except that standard deviation of each property list in claim 9 is within +/- 12%. The exact length of all the standard deviation is deemed to be a cause effective variable with regard to the different properties of the rigid areas. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as a standard deviation of +/- 12% through routine experimentation in the absence of a showing of criticality in the claimed deviation. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Selection of the relative parts by weight of the components with in the board ranges claimed is taken as being within the ordinary skill of one in the art absent unexpected results.

Art Unit: 1772

17. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplo (6,294,729).

Kaplo discloses all the limitations of the instant claimed invention except for the claimed rigid area properties of modulus of elasticity, coefficient of thermal expansion, shrinkage, impact, and the hinge region equation. Since Kaplo discloses the same layers desired by Applicant, i.e. an amide fabric layer coated with polyester or PVC, it is inherent that the EMI shield have the same properties as claimed in claim 34 and the hinged region equation of claim 33.

Conclusion

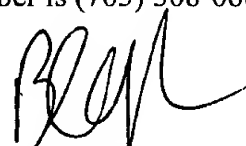
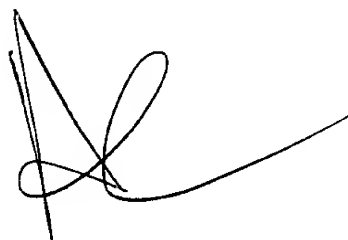
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Blaine Copenheaver can be reached by dialing (703) 308-1261. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

12/13/01



BLAINE COPENHEAVER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700